

REMARKS

The Examiner objected to Claim 1 as well as dependant Claims 7, 8, and 15 because of a discrepancy in the July 14, 2003, amendment between the clean and redlined version of Claim 1. Specifically, the clean version used the language “assigning no score to each non-match” and the redlined version used the language “assigning a zero or negative score to each non-match”.

FIG.s 8 and 11 indicate that a negative score is assigned when the corresponding actual characteristic is not wanted, not when a non-match occurs. Claim 1 is herein amended to reflect “assigning a positive integer numerical score for each match of a wanted data element that increases in accordance with an increasing preference ranking, assigning a nominal positive numerical score for each match designated no-preference, and assigning a zero or negative integer score to each match of an unwanted data element that decreases in accordance with a decrease in preference ranking”. The language of assigning a zero or negative score to a non-match has been deleted.

Additionally, Claim 1 is further amended herein to clarify that (1) the purpose of the method is to match one registered entity with another, (2) that the registered entities of the method specify not only wants but “do not wants” (See paragraph [0052] and FIG.s 6, 8 and 11), (3) that characteristics are grouped into categories (See FIG. 7 and paragraph [0052]), and (4) that the method of the present invention specifically involves “cross-matching a user entity’s desired characteristics with other entities’ actual characteristics and vice versa” (See paragraph [0058]) and that the cross-matching steps further include “determining a ratio of each numerical score to maximum possible score for each characteristic category, averaging said ratios in each category and expressing the average as a percentage match for each category; totaling the

numerical scores to give an overall numeric score; and, using the percentages for each category and the overall numeric scores to sort and prioritize said other entities' based upon said comparison in order match the user entity to the closest other entity. (See FIG.s 8 and 11 and paragraphs [0055] [0058], [0059]).

Dependent Claims 4, 8, 9 and 11 are amended herein to reflect the amendments to Claim 1. Additionally, Claims 10 is amended to further clarify the invention as illustrated in FIGs. 8 and 11 and described in paragraph [0054]. Specifically, the cross-matching of the present invention is further comprised of "assigning a maximum *positive* score for each comparison when said preference ranking is equivalent to "must" and the actual characteristic matches or when said preference ranking is equivalent to "must not be" and said actual characteristic is a non-match".

As with independent Claim 1, independent Claim 12 is amended herein to reflect that data elements in each profile are grouped in to *categories*, that assigning a zero or negative score to each match of an unwanted data element that decreases in accordance with a decrease in preference ranking as well as the details of the scoring method, that each category is scored by averaging the ratios of each numerical score for a particular data element to the total possible score for that data element and expressing said average as a percentage match for said category, that an overall score is determined by totaling each numerical score; and that the percentages for each category and the overall numeric scores are used to sort and prioritize the profiles. (See discussion for independent Claim 1, above.)

New Claims 21 and 23 further claim, as described in paragraph [0054] of the Specification, potential matches are disqualified when a corresponding actual characteristic is an unwanted data element with preference ranking equivalent to "must not be" and when a

corresponding actual characteristic is not a wanted data element with a preference ranking equivalent to “must be”.

New Claims 22 and 24 further claim, as described in paragraph [0054] a zero score is assigned when a corresponding actual characteristic is not a desired data element with a preference ranking equivalent to “strongly want” or “want”.

The Examiner rejected Claims 1-4, 7-12, and 15-19 under 35 U.S.C. §103(a) as being unpatentable over Sutcliffe et al. ‘122 in view of Shorter ‘681.

The Sutcliffe et al. ‘122 patent discloses a method and apparatus for a matchmaking type service that compares criteria data of a first user with characteristic data other users and vice versa. A comparison of the respective characteristic and criteria data is performed and a list of matches is provided to the first user so that the first user may contact at least one of the other users. However, the cross-matching methods used to sort and prioritize potential matches disclosed in Sutcliffe et al. ‘122 are not nearly as detailed and precise as that of the present, resulting in a reduced likelihood that the resulting list of potential matches will be suitable for the user.

The Shorter ‘681 patent discloses a method for identifying unknown data files that may pertain to a particular individual by matching weighted identifying attributes of that individual with data contained in the file. Shorter ‘681 relates to several data processing systems operating collaboratively over the internet (Col. 3, lines 5-20) and more particularly to a method for determining an object identifier for an object within a plurality of data processing system networks (Col 4, lines 54-64). The patent describes how an object (i.e. a data file) includes various attributes (data such as last name, first name, social security number, gender, etc.) and is assigned a unique object identifier that is required for access to the object. The invention relates

to using the attributes of the object to determine the object identifier so that the object may be retrieved from the database. (See Col. 6, lines 19-40). A system administrator gives particular attributes a name (i.e. last name, social security number, etc.) and a value. The value is given a weight (positive or negative) based upon the *objective probability* (not a subjective preference as in the present invention) that an exact match of a particular attribute will produce an exact match for the entire object or a non-match will be indicative of a non-match. (See Col. 6, lines 41 – Col. 7, line 4). For example, a match of a social security number attribute would be weighted high positive, whereas a non-match would be weighted high negative. This means that if you are searching for a data file on someone whose SSN is 000-00-000 and a data file “x” includes a social security number attribute (a match), it is highly likely that data file “x” was compiled for the person whose data file you are looking for. Whereas if the social security number attribute is different (a non-match), it is highly likely that data file “x” is not the file you want. On the other hand, a match or non-match for a first name would have minimal value positive or negative. (See Col. 6, lines 41-Col. 7, line 4). Criteria for the process of determining an object identifier through object attribute analysis may consist of single attributes or combinations of attributes that are input by a system administrator, keeping in mind that some combinations of attributes will be insufficient to produce a match. (See Col 7, lines 20-55).

According to MPEP §2143, the first criteria for establishing prima facie obviousness is that the prior art references when combined must teach or suggest all the claim limitations.

Regarding independent Claims 1 and 12, neither Sutcliff et al. ‘122, nor Shorter ‘681 disclose the a cross-matching method or system that includes the features of (1) having the registered users enter subjective data identifying and describing their wants *and do not wants* (1) determining a ratio of each numerical score to maximum possible score for each characteristic

category, averaging said ratios in each category and expressing the average as *a percentage match for each category*, (2) totaling the numerical scores to give an overall numeric score, and (3) using the percentages for each category and the overall numeric scores to sort and prioritize.

Claims 2, 3, 4, 8, 9 and 11 depend from Claim 1, include the same unique features and are likewise distinguishable over Sutcliffe et al. '122 in view of Shorter '681.

Claim 10, depends from Claim 1, includes the same unique features and is likewise distinguishable over Sutcliffe et al. '122 in view of Shorter '681. Claim 10 further includes the additional feature of assigning a maximum *positive* score for each comparison when said preference ranking is equivalent to "must" and the actual characteristic matches or when said preference ranking is equivalent to "must not be" and said actual characteristic is a non-match. Again, neither Sutcliffe et al. '122, nor Shorter '681 disclose this feature.

Claims 16, 17, 18 and 19, depend from Claim 12 include the same unique features as Claim 12 and are likewise distinguishable over Sutcliffe et al. '122 in view of Shorter '681.

New Claims 21 and 23, depend from Claims 11 and 18, respectively and include the same unique features discussed above and are likewise distinguishable over Sutcliffe et al. '122 in view of Shorter '681. Additionally, Claims 21 and 23 further claim, the unique feature of disqualifying a potential match when a corresponding actual characteristic is an unwanted data element with preference ranking equivalent to "must not be" and when a corresponding actual characteristic is not a wanted data element with a preference ranking equivalent to "must be".

New Claims 22 and 24, depend from Claims 11 and 18, respectively, and include the same unique features discussed above and are likewise distinguishable over Sutcliffe et al. '122 in view of Shorter '681. Additionally, Claims 22 and 24 further claim, the unique feature of

assigning a zero score when a corresponding actual characteristic is not a desired data element with a preference ranking equivalent to “strongly want” or “want”.

In view of the above amendments and remarks, the applicant contends that this patent application is now in condition for allowance, and respectfully requests a Notice of Allowance for all pending claims.

Respectfully Submitted,

Pamela M. Riley
(Registration No. 40,146)
Law Offices of Royal W. Craig
10 North Calvert Street, Suite 153
Baltimore, MD 21202